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The Dynamics of No One Left Behind: Contestation of Pentahelix Actors in Sustainable Tourism Governance in the Coastal Area of Tanjung Bunga, Indonesia

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Abstract

Sustainable development has become a global agreement in driving world economic growth. Sustainable development pays attention to aspects of social, economic and environmental inclusion, as important elements in all development sectors, as well as the tourism sector. This study analyzes the dynamics of interaction between Pentahelix actors in sustainable tourism governance in the coastal area of Tanjung Bunga, South Sulawesi. Through the No One Left Behind (NOLB) approach, this research highlights the roles of five key actors-government, academia, business, community and media-in creating inclusive and sustainable tourism governance. The research used a mixed-methods approach, including in-depth interviews and questionnaires, to evaluate the level of participation, collaboration, and conflict among these actors. The findings of this study show that collaboration among pentahelix actors is still not optimal, and that local communities are often marginalized in the decision-making process until the conflict resolution stage. This study provides recommendations to strengthen community participation through training and intensive dialogue between actors to create a more equitable and sustainable tourism governance framework.

Keywords

Sustainable tourism; Pentahelix collaboration; No one left behind (NOLB); Inclusive governance; Community participation

Introduction

Sustainable tourism has become an important agenda in supporting global economic growth while maintaining environmental sustainability and social welfare (Aall, 2014;

Higgins-Desbiolles, 2018; Pan *et al.*, 2018; Prianto *et al*., 2021; Prianto *et al.*, 2024; Rengganis *et al*., 2023; Richardson, 2021). The concept of No One Left Behind (NOLB) adopted by the United Nations through the Sustainable Development Goals (SDGs) emphasizes that social and economic inclusion are important elements in all development sectors, including tourism (Butcher, Acuto and Trundle, 2021; Mabibibi, Dube and Thwala, 2021; Mweri, 2020; Prianto and Abdillah, 2023a; Smith and Spencer, 2020; Whitcraft *et al*., 2019). In Indonesia, the Tanjung Bunga coast has emerged as one of the potential areas to be developed as a sustainable tourism destination, with the natural and cultural riches that accompany its development (Chienwattanasook and Prianto, 2018; Hakim, Razak and Prianto, 2024; Pratomo, Samsura and Krabben. 2022, 2022; Prianto and Abdillah, 2023b; Prianto *et al*., 2024; Sriyakul *et al*., 2019; Younus *et al.*, 2024;). However, this area also faces significant challenges related to governance, especially in ensuring that all stakeholders can enjoy the benefits of the tourism sector equally (; Kılkış, 2024; Saleh, Sukoso, Tamsil, 2016).

The Tanjung Bunga coast has experienced rapid tourism development in recent years (Surya *et al*., 2021). Increased investment in the tourism sector, supporting infrastructure, and international promotion have made this area one of the leading tourist destinations in the South Sulawesi region (Sari, 2024). However, along with this development, various challenges have emerged related to poorly coordinated governance, conflicts of interest between stakeholders, and negative impacts on the environment and local communities (Handam, Prianto and Nahruddin, 2020). One of the crucial issues in the context of sustainable tourism governance in Tanjung Bunga is the unfair distribution of economic and social benefits (Jermsittiparsert *et al.*, 2019; Jermsittiparsert *et al*., 2021). Although tourism provides opportunities for economic growth, its benefits are not always felt evenly by local communities (Surya, 2014; Hakim, Razak and Prianto,, 2024). Certain groups, especially traditional coastal communities, often feel marginalized in the development and decision-making process (Surya *et al.*, 2020). This raises concerns that tourism that is developing in this area only benefits certain parties, while local communities are at risk of losing access to the natural resources that are the basis of their lives.

Empirical data shows that tourism in Tanjung Bunga has contributed significantly to regional income. According to data from the South Sulawesi Tourism Office, revenue from the tourism sector in Tanjung Bunga increased by 25% between 2019 and 2023. However, a study conducted by the Central Statistics Agency (BPS) in 2023 revealed that only about 35% of the local population was directly involved in the tourism sector, with most working in low-wage jobs such as hotel workers and informal tour guides. In addition, more than 60% of the land across the coastal area is now owned by outside investors, resulting in local communities losing access to their natural resources and land. Deforestation of mangroves and pollution from hotels and other tourism facilities have led to a decline in environmental quality, which threatens the sustainability of the area as a tourist destination (Harahap, Julvirta and Musawantoro, 2022; Iskandar, Fajar and Asmirah, 2024). This further exacerbates the vulnerability of coastal communities who depend on natural resources to meet their living needs.

As a response to these problems, the Pentahelix concept as a cross-sector collaboration model is relevant to apply. This model involves five main actors: government,

academia, business, community and media, all of which play a role in creating inclusive and sustainable governance. However, the implementation of the Pentahelix model in Tanjung Bunga is still far from optimal. Many actors are involved in the tourism management process, but collaboration between these actors is often disrupted by differences in interests and a lack of effective communication. As a result, the goal of achieving inclusive sustainable tourism that leaves no one behind is still a major challenge. Sustainable tourism refers to tourism development that considers economic, social, and environmental impacts in a balanced manner, so that it can provide long-term benefits for all stakeholders. The basic principle of sustainable tourism is that tourism activities must be managed in a way that supports environmental conservation, strengthens local culture, and improves the welfare of local communities.

Research on sustainable tourism governance in coastal areas has been conducted by many scholars and researchers (Borges, Eusébio and Carvalho, 2014; Farmaki, 2020; Mance, Vilke and Debelić, 2020; Nitivattananon and Srinonil, 2019; Wongthong and Harvey, 2014). Previous studies generally focus on the analysis of the environmental or economic impacts of tourism development (MacNeill and Wozniak, 2018; Towner and Milne, 2017). Several studies also highlight the importance of local community participation in tourism development (Scheyvens and Biddulph, 2018). However, these studies often ignore the dynamics of actors involved in tourism management, especially in the context of cross-sector collaboration through the Pentahelix approach. The novelty of this study lies in the in-depth analysis of the contestation and dynamics of interaction between Pentahelix actors in sustainable tourism management in the Tanjung Bunga coastal area. This study attempts to fill the gap in literature by integrating the NOLB concept as a basic principle in tourism management in Tanjung Bunga. This concept emphasizes that all parties, including vulnerable community groups, must benefit from tourism development (Burke and Siyaranamual, 2019). Through this approach, the study aims to ensure that the economic, social, and environmental benefits of tourism in Tanjung Bunga can be felt evenly by the entire community, not just a handful of parties. Previous studies have focused more on the aspect of community participation without paying attention in detail to the role of the media or academics in the Pentahelix model. Therefore, this study makes a new contribution by analyzing the roles of all actors in the Pentahelix model comprehensively, and how their involvement can create better and more inclusive governance.

The main objective of this study is to analyze the dynamics of interactions between Pentahelix actors in sustainable tourism management in the coastal area of Tanjung Bunga. This study is expected to provide a better understanding of how cross-sector collaboration can be strengthened to create inclusive and sustainable governance, as well as provide relevant policy recommendations for decision makers at the local and national levels. The implications of this study can be felt in two main aspects. First, this study contributes to the sustainable tourism literature by offering a new perspective on the dynamics between actors in the Pentahelix model. Second, the findings of this study are expected to help policy makers in formulating more effective strategies in managing conflicts between actors, increasing community participation, and encouraging environmental sustainability in coastal areas. This study is not only relevant to tourism development in Tanjung Bunga but can also be applied to other coastal areas in Indonesia that face similar challenges.

Methodology

This study uses a mixed methods approach, combining qualitative and quantitative methods to gain a more comprehensive understanding of the dynamics of Pentahelix actor interactions in sustainable tourism governance in the coastal area of Tanjung Bunga. The qualitative approach was conducted through in-depth interviews and document analysis, aiming to explore the perceptions, experiences, and interests of key actors in tourism management. Respondents were purposively selected from local government (5 respondents), academia (3 respondents), business actors (3 respondents), local communities (7 respondents), and the media (2 respondents). These respondents were selected based on their active involvement in tourism governance in Tanjung Bunga, both in policy making, management, and direct participation. Specifically for local communities, respondents were selected from individuals directly affected by tourism development in coastal areas, while for academics, prioritized those who have publications or research related to tourism sustainability, especially in the Makassar region. Semi-structured interviews were carried out to gather information regarding their roles, responsibilities, collaboration dynamics, and the challenges they face in the context of sustainable tourism. In addition to interviews, policy document analysis and official reports from relevant agencies were also conducted. The qualitative data were analyzed to identify key themes and to understand interaction patterns between the actors.

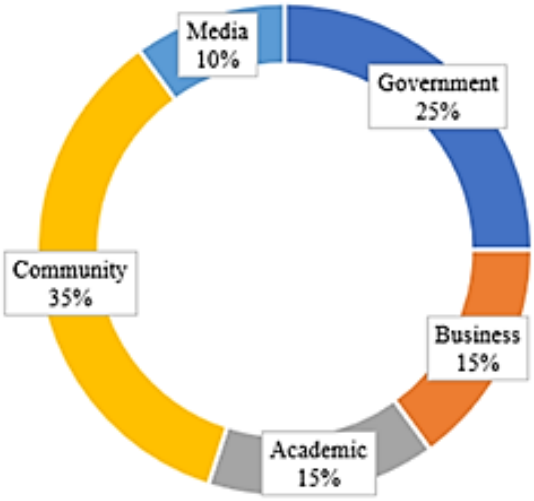

Figure 1: Informant/Respondent Characteristics Based on Actors

On the other hand, the quantitative approach was employed through the distribution of questionnaires designed to measure important variables, such as community participation, perceptions of economic benefits, and the environmental impacts of tourism development. Data analysis in this study was conducted through qualitative and quantitative approaches. Data from in-depth interviews were analyzed using thematic analysis, with stages of open coding, identification of thematic patterns, and in-depth interpretation of the dynamics of Pentahelix actors. To ensure regularity and connectedness between themes, this analysis was supported by NVivo software.

Meanwhile, quantitative data from the questionnaires were analyzed using descriptive and inferential statistical methods. Correlation tests were applied to identify the relationship between the understanding of the Pentahelix concept, the level of participation in decision-making, as well as the perception of tourism sustainability. Data processing was conducted using SPSS, and the results were presented in tables and diagrams to clarify the research findings. This combined approach allows for a more comprehensive understanding of actor interactions in sustainable tourism governance, while strengthening opportunities for future research replication.

Research Objectives Identification; Hypothesis Conducting
Data Collection: Interview; Literature Review; Questionnaires
Data Analysis; Interpretation of Results
Finding Integration; Data Visualization

Figure 2: Research Process

Results

This study seeks to understand the dynamics of interactions between actors within the Pentahelix framework that includes five main actors: government, academics, business, community, and media, in sustainable tourism governance in the Tanjung Bunga coastal area. Through in-depth interviews with key actors and analysis of policy documents, several main themes were identified.

Dynamics of Pentahelix Actors' Contestation in Tourism Governance in Tanjung Bunga

Collaboration between Pentahelix actors is considered a key element to promote sustainable tourism (Chamidah, Guntoro and Sulastri, 2020; Maulana and Yulianti, 2022; Nasution *et al*., 2023). From the interviews conducted, it was seen that each actor had a different perception of the extent to which the collaboration was going well. Most respondents from the local government claimed that collaboration had been well established through several joint programs involving the community, academics, and businesses. However, this finding differs from the opinions expressed by local communities, who felt that their involvement in decision-making was still very limited.

The data in table 1 shows that there is significant variation in the level of involvement of each actor. The government is one of the actors with the highest level of involvement in the tourism policy-making process. They are actively involved in the process of formulating regulations that govern the direction of tourism development in the region. However, despite their very important role, the government often has difficulty in collaborating with other actors, which can hinder the achievement of common goals in sustainable tourism development. Academics also play an important role, especially in the research and development of innovations in the tourism sector. However, the level of involvement of academics is still moderate, and they are not fully involved in strategic planning. This indicates that there is potential that has not been maximized, where the

scientific-based contributions they produce have not been optimally used in the decision-making process. On the other hand, the business sector has a high level of involvement, especially in terms of funding tourism projects. However, the main focus of business actors still tends to be on profit interests, which can affect the sustainability of tourism if not balanced with environmental and social interests.

Table 1: Actors' Perceptions of the Level of Collaboration in Pentahelix

Actors	*Level of Involvement (1-5)*	*Description*
Government	4	Involved in the formulation of tourism policies but sometimes having difficulty working with other actors.
Academia	3	Involved in research and development but less involved in planning.
Business	4	Active in funding tourism projects but focuses more on profit interests.
Community	2	Involved only at the implementation stage, with little participation in decision-making.
Media	3	Plays a role in promoting tourism but is not involved in planning or strategy development.

Community and media participation in this collaboration is relatively lower compared to other actors. The community, although at the forefront of implementation, is only involved to a limited extent and is less involved in the strategic decision-making process. This creates a gap in the inclusion of local communities, who should have a greater role in determining the direction of tourism development in their own areas. The media, on the other hand, plays an important role in promoting tourism, but is less involved in the deeper strategic planning process. This shows that the Pentahelix collaboration in this region still faces challenges in creating more balanced and inclusive participation among the various actors involved. The uneven level of involvement in tourism governance in the Tanjung Bunga coastal area shows an imbalance in the application of the Pentahelix Theory and governance network theory. The government and business sector tend to dominate, while academics, communities, and the media have a more marginal role, especially in the planning and decision-making process. According to Freeman's Stakeholder Theory (2018 & 2023), this imbalance indicates that some actors, especially the community, who should be the main stakeholders, are not optimally involved. This creates the risk of a lack of local inclusion and support, which are important in ensuring the sustainability of tourism policies. In addition, the minimal participation of academics in planning also indicates a lack of evidence-based approaches, which is in line with the view of Ansell and Gash (2018) a Collaboration Theory that requires full involvement and interdependence between all participating parties.

Local community participation is an important element in sustainable tourism development (Hajar and Kholik, 2022; Lawelai *et al*., 2024; Zitri *et al*., 2024). Interviews with community representatives showed that their participation is still minimal, especially in terms of planning and decision-making. They are generally only involved in the implementation stage, such as in the provision of tourism services or

labour. Several local communities stated that although they welcomed tourism initiatives, there was no clear mechanism to accommodate their aspirations. Community participation was more visible in the form of economic involvement, such as running food stalls or renting out homestays, but not in strategic decision-making. This raises concerns that the benefits of tourism are not distributed evenly.

Figure 3: Forms of Community Participation in Tanjung Bunga Tourism

Figure 3 illustrates that local communities participate more in direct economic activities such as providing homestays or becoming small traders. However, participation in decision-making or strategic management is still very minimal. This shows the potential for developing community capacity to be more involved in overall tourism governance. The main challenge faced in sustainable tourism management in Tanjung Bunga is related to conflicts of interest between actors. From the interview results, it was found that business actors often have different priorities from local communities. While business actors focus on economic benefits, communities prioritize environmental sustainability and fair distribution of benefits. This conflict affects the dynamics of collaboration and often causes distrust between actors. In addition, regulatory challenges were also identified as a major obstacle. Local governments are sometimes considered less responsive in formulating policies that are in line with local needs. Several respondents mentioned that the policies implemented tend to favour business actors, who have greater resources to influence decision-making.

Figure 4 shows that there are three factors that are significant obstacles. The most dominant is the conflict of interest between actors, reaching 40%. This shows that there are differences in goals and priorities among stakeholders, such as government, business actors, communities, academics, and the media, which often lead to disagreements in strategic decision-making related to sustainable tourism. This conflict of interest can hinder the implementation of comprehensive and effective policies, because each party prioritizes their own profits or interests rather than common goals.

Another challenge is the lack of community participation, which covers 35%. Minimal community involvement shows that they are not sufficiently empowered in the planning and decision-making process, even though the role of local communities is very important in ensuring the sustainability of tourism, especially in coastal areas such as Tanjung Bunga. Low community participation can be caused by low awareness or limited access to information, which leads to policies that do not reflect local interests and needs. In addition, unclear government regulations account for 25% of the main challenges. Unclear regulations make policy implementation difficult and often confuse other actors involved. This can worsen coordination between sectors, especially in terms of compliance with standards set to maintain tourism sustainability. In the absence of clear guidelines, collaboration between government and other actors becomes increasingly difficult, which ultimately hinders the achievement of inclusive and sustainable tourism goals.

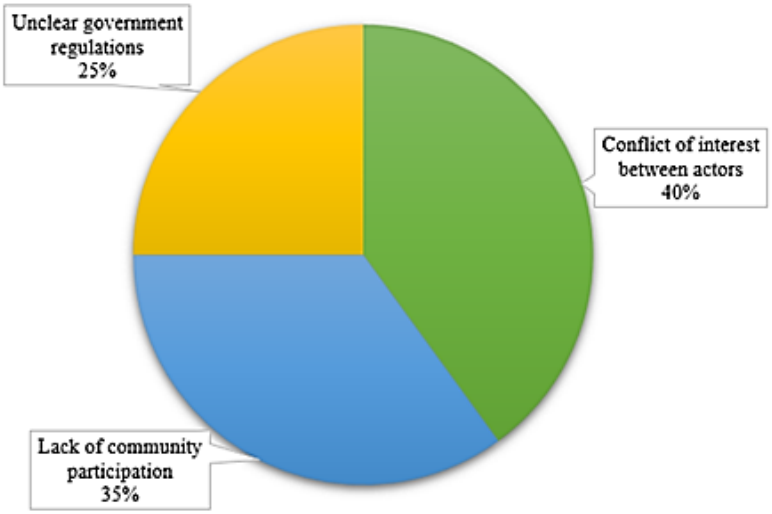

Figure 4: Challenges Facing Tourism Governance in Tanjung Bunga

Strengthening Collaboration Strategy for Sustainable Tourism

Various strategies were proposed by respondents to strengthen collaboration between actors in tourism governance. One of the proposed strategies is increasing the capacity of local communities through training and mentoring, so that they can play a greater role in decision-making and tourism management. In addition, a more intensive dialogue mechanism is needed between business actors and the community, to reduce conflicts of interest and create better synergy. Several respondents from the academic side also suggested the need for a more responsive evaluation of regulations to local needs. Existing policies need to be adjusted to the realities on the ground, by considering the environmental and social impacts of tourism development

Based on figure 5, there are three strategies proposed to improve collaboration between Pentahelix actors in tourism governance in Tanjung Bunga. The most dominant strategy is local community's capacity building reaching to 45%. This shows that improving the skills and understanding of local communities regarding their role in sustainable tourism is considered a crucial step. Through capacity building, it is hoped

that communities can participate more actively and contribute significantly to the planning, implementation, and evaluation processes of tourism policies. The next strategy is a more responsive regulatory evaluation, which covers 30%, as well as intensive dialogue between actors contributing 25%. Regulatory evaluation aims to create policies that are more relevant and adaptive to local conditions, so that each actor can collaborate more effectively. Intensive dialogue between actors is also needed to reduce conflicts of interest and improve understanding between them, so that better synergy is created in managing sustainable tourism.

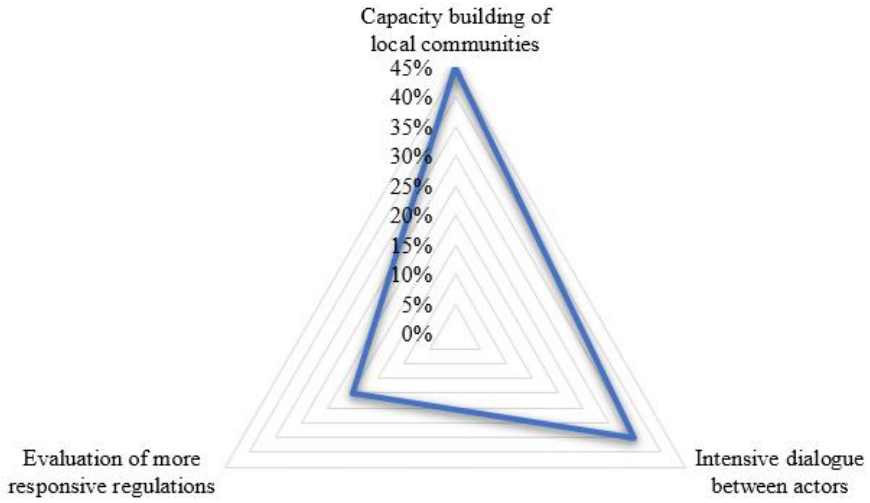

Figure 5: Proposed Strategy to Improve Collaboration between Pentahelix Actors

Ansell and Gash's (2018) collaboration theory supports the importance of intensive dialogue and capacity building of local communities. This theory emphasizes that effective collaboration can only occur if all parties are actively involved and have sufficient skills to contribute to the decision-making process. In this context, capacity building of local communities becomes an important strategic step, because higher community participation can increase the legitimacy and success of tourism policy implementation. With better community involvement, conflicts that often occur between actors can be minimized because they have a deeper understanding of their roles. More responsive regulatory evaluation can also be explained through the Adaptive Governance Theory, which emphasizes the importance of regulations that can adapt quickly to changes in social and environmental dynamics. In Tanjung Bunga, unclear policies have been one of the main barriers to collaboration, so reviewing and revising policies will help create a more inclusive framework. With clear and adaptive regulations, communication and coordination between Pentahelix actors can run more smoothly, thus encouraging the creation of more sustainable tourism governance.

Based on the data presented (see Figure 6), social media occupies the top position as the most frequently used tourism promotion channel in tourism promotion in Tanjung Bunga, with a usage percentage reaching more than 60%. This reflects a shift in promotion patterns in line with the digitalization trend, where social media platforms become an effective and efficient means of communication to reach a wider audience, especially the younger generation and active internet users. The speed of information

dissemination and the ability of social media to facilitate direct interaction with the audience make it a dominant promotional tool. On the other hand, local websites also play a significant role, although not as large as social media, with a usage frequency of around 20%. Local websites function as official and trusted sources of information, usually managed by local authorities or related institutions. Although not as fast as social media in disseminating information, websites offer more structured and detailed content, making them a more comprehensive reference for tourists who need specific information about destinations, facilities, and activities in Tanjung Bunga. In contrast, local television and print media have a lower usage frequency, each below 15%. This shows that conventional promotion methods are starting to lose relevance in the context of modern and more digital tourism. Although still used, especially for more traditional market segments, the contribution of this medium is increasingly being marginalized by more interactive and accessible digital platforms. This also indicates a change in audience preferences towards more flexible and technology-based promotional media.

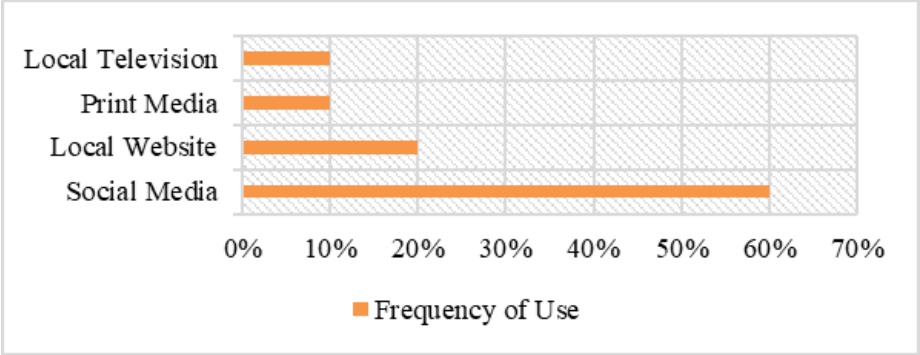

Figure 6: The Role of Media in Tanjung Bunga Tourism Promotion

Interaction of Pentahelix Actors in Sustainable Tourism Governance in the Coastal Area of Tanjung Bunga, Indonesia

One of the objectives of the study was to measure the level of respondents' understanding of the Pentahelix concept in tourism governance. The results of the analysis showed variations in understanding among actors.

Table 2: Level of Understanding of Pentahelix

Actor Category	*Average Comprehension Score*	*Standard Deviation*
Government	4.2	0.5
Academia	4.0	0.6
Business	3.5	0.7
Community	2.8	0.9
Media	3.2	0.8

Based on the data describing the level of understanding of actors towards the Pentahelix concept in tourism governance (see Table 2), the government has the highest understanding score with an average of 4.2 and a standard deviation of 0.5.

This indicates that the government has a very good understanding of their role and contribution in the Pentahelix scheme. As the main driver of policy, the role of the government in regulating, facilitating, and coordinating various other actors is very vital. The low standard deviation indicates that this level of understanding is consistent among government actors.

Academic actors are in second place with an average understanding score of 4.0 and a standard deviation of 0.6. Academics have an important role in providing scientific insights and in-depth research-based analysis related to tourism sustainability. They contribute through research and development of data-driven governance models. Although slightly lower than the government, academics' understanding of this concept is quite solid and relatively consistent, although there is a slightly higher variation compared to the government. On the other hand, business actors, media, and the public showed a lower level of understanding. Business had an average score of 3.5 with a standard deviation of 0.7, media with an average score of 3.2 and a standard deviation of 0.8, while the public had the lowest average score of 2.8 with a standard deviation of 0.9. These scores indicate that although business and media have a role in promoting and supporting sustainable tourism, their understanding of the Pentahelix concept is not as good as the government and academics. The public showed variation in understanding, indicating that there is still a gap in understanding of how they can be involved in Pentahelix-based tourism governance.

This study also assessed the level of respondent participation in decision-making related to sustainable tourism. The results showed that community participation is still very limited.

Table 3: Paticipation of Pentahelix in the Decision-Making

Actor Category	*Average Participation Score*	*Standard Deviation*
Government	4.1	0.5
Academia	3.8	0.6
Business	4.0	0.6
Community	2.5	1.0
Media	3.0	0.8

Table 3 shows that the government is again in the top position with an average participation score of 4.1 and a standard deviation of 0.5. This confirms the dominant role of the government in decision-making, in accordance with its function as the main regulator in tourism policy. The low standard deviation indicates high consistency in government participation, where most actors in this category are actively involved in the decision-making process. Business actors have a fairly high participation score, namely 4.0 with a standard deviation of 0.6, almost on par with the government. This shows that the business sector, especially tourism industry players, are increasingly involved in the decision-making process, in line with their role in developing and managing tourist destinations. Academics have a participation score of 3.8 with the same standard deviation of 0.6. Although they have a deep understanding, academic participation is slightly lower than business, which may be due to their role focusing on research and consultation than direct implementation in tourism policy. The community and media show relatively low levels of participation. The community only has an average

participation score of 2.5 with a standard deviation of 1.0, indicating large variations in their involvement. This may be due to limited access or public understanding of decision-making mechanisms involving sustainable tourism. Meanwhile, the media recorded an average score of 3.0 with a standard deviation of 0.8, indicating that although they play a role in publishing information, their involvement in strategic decisions is still limited. This may be due to the media's focus being more on disseminating information rather than direct participation in the policy process.

Respondents' perception data on tourism sustainability in Tanjung Bunga shows the complex dynamics between Pentahelix actors, consisting of government, academics, business, community, and media (see Table 4). The Pentahelix theory, which views collaboration from various sectors as the key to the success of sustainable tourism development, is reflected in the variation in perceptions of each actor in the table. The government, with an average score of 4.3, is identified as the actor with a dominant role in sustainability governance. According to governance theory, the government has a regulatory, planning, and empowerment role through policies that support sustainability. The low standard deviation (0.4) shows that perceptions of the government are quite consistent among respondents. This indicates that the government is seen as the main driver and has strong legitimacy in realizing sustainable tourism. Good Governance theory supports this by emphasizing the importance of the government in facilitating the participation of other actors and providing a stable regulatory framework.

Table 4: Level of Perceptions on Tourism Sustainability

Actor Category	*Average Perception Score*	*Standard Deviation*
Government	4.3	0.4
Academia	4.1	0.5
Business	3.9	0.6
Community	3.0	0.8
Media	3.5	0.7

The role of academics with an average score of 4.1 and a standard deviation of 0.5 confirms their position as providers of research-based knowledge and innovation in sustainable tourism. Based on the theory of innovation in sustainable development, academics serve as catalysts for change that help identify innovative solutions to environmental and social problems in the tourism industry. This role is evident from the positive assessment given by respondents. However, the larger standard deviation from the government indicates variations in how academics view or influence sustainability, which can be attributed to different disciplinary perspectives. In the Triple Helix theory, academics collaborate closely with the government and business sector to produce innovation, but this data shows that the role of academics is still not considered fully aligned or synergistic with the government.

The business, community, and media categories showed lower perceptions regarding tourism sustainability. Business with a score of 3.9 and a standard deviation of 0.6 may reflect the dilemma between profitability and social responsibility. In the perspective of green economy theory, businesses should ideally support the principle of sustainability, but in practice are often faced with a conflict between economic growth and

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environmental sustainability. Community and media, with scores of 3.0 and 3.5, respectively, showed more diverse perceptions, as seen from the higher standard deviations (0.8 and 0.7). This can be explained by the theory of public participation in sustainable development stating that the level of public awareness and media involvement in communicating sustainability issues often varies depending on access to information, education, and environmental awareness. This variation illustrates the challenge in building consensus among Pentahelix actors to promote inclusive sustainability in the Tanjung Bunga coastal area.

Table: Assessment of Conflict Between Actors

Actor Category	*Average Conflict Score*	*Standard Deviation*
Government	2.5	0.9
Academia	2.8	0.8
Business	3.0	0.7
Community	3.5	0.6
Media	3.2	0.5

The average conflict score data between Pentahelix actors in tourism governance in Tanjung Bunga shows differences in the level of conflict perception among government, academics, business, community, and media (see Table 5). The government received the lowest conflict score (2.5) with a standard deviation of 0.9, indicating that although conflict is relatively low compared to other actors, the variation in conflict perception is quite large among respondents. This could be due to differences in experience and interests of individuals or groups in interacting with the government. From a governance theory perspective, low government conflict scores could indicate strong authority and stable management, but variations in perception indicate that not all groups feel aligned or involved in the decision-making process. Academics, with an average conflict score of 2.8 and a standard deviation of 0.8, showed a higher level of conflict than the government, but not as high as business, community, or media. The role of academics, which often functions as a balanced between the government and the business sector, can trigger differences in views, especially in terms of implementing the concept of sustainability based on science versus economic and political considerations. Conflicts that arise within academic groups are likely rooted in differences in perspective in their approach to sustainable tourism. In social innovation theory, academics may face challenges in aligning scientific knowledge with the interests of other, more pragmatic actors.

On the other hand, the community (3.5) and media (3.2) showed higher conflict scores, with lower standard deviations (0.6 and 0.5). This suggests that the perception of conflict between the community and the media is more consistent, most likely due to their position outside the formal decision-making structure. Social conflict theory highlights that tensions within communities often arise from dissatisfaction with the distribution of benefits and impacts of tourism. Communities directly involved in tourism activities or affected by tourism policies are more vulnerable to feelings of injustice or neglect of local interests. The media, with their role as observers and critics, are also likely to experience conflict with other actors, especially when they

expose controversial issues related to sustainability or inequality in tourism management. Conflict in tourism governance in Tanjung Bunga cannot be ignored, especially among the community and media who have strong involvement in monitoring sustainability practices. The collaborative role proposed in the Pentahelix theory faces challenges in uniting the interests of different actors, which need to be managed well through open and participatory dialogue mechanisms so that conflict can be minimized.

Discussion

Inferential analysis was conducted to evaluate the relationship between Pentahelix understanding, participation in decision-making, and perceptions of tourism sustainability. The results of the analysis showed a significant positive relationship between Pentahelix understanding and the level of participation in decision-making, as well as perceptions of tourism sustainability. The results of the inferential correlation analysis (see Table 6) illustrate the relationship between several variables that play an important role in sustainable tourism governance in the Tanjung Bunga coastal area, especially in the context of the Pentahelix theory. In the relationship between Pentahelix understanding and decision-making participation, the correlation coefficient of 0.65 and the significance level of $p < 0.01$ indicate a fairly strong positive relationship. This means that the better the actors' understanding of the Pentahelix concept, the higher their level of participation in the decision-making process. In participatory governance theory, effective participation is often influenced by the actors' understanding of the structure and role of each in a collaborative system. This participation is important for creating inclusive decisions that are more accommodating to the interests of many parties.

Table 6: Analysis of the Correlation between Variables

Variable X	*Variable Y*	*Correlation Coefficient (r)*	*Significance (p)*
Pentahelix Understanding	Participation in Decision Making	0.65	< 0.01
Pentahelix Understanding	Perception of Sustainability	0.58	< 0.01
Participation	Perception of Sustainability	0.72	< 0.01
Conflict	Effectiveness of Governance	-0.65	< 0.01

Furthermore, the correlation between Pentahelix understanding and perception of sustainability also shows a significant positive relationship, with a correlation coefficient of 0.58 and a significance level of $p < 0.01$. This relationship indicates that the better the actors' understanding of Pentahelix, the more positive their perception of tourism sustainability in the Tanjung Bunga area. According to the theory of sustainable development, understanding the concept of sustainability is greatly influenced by effective multi-stakeholder collaboration. In other words, if actors in the governance system have a clear understanding of their respective roles within the Pentahelix framework, they are better able to identify steps that support tourism

sustainability, both from an economic, environmental, and social perspective. The correlation between participation and perception of sustainability is even stronger, with a coefficient of 0.72 and a significance level of $p < 0.01$. This is one of the most significant relationships in this analysis, indicating that higher levels of participation in decision-making are strongly associated with more positive perceptions of sustainability. In this context, participatory governance theory emphasizes that the active involvement of all actors can create a sense of ownership and shared responsibility for tourism sustainability. This involvement also reduces resistance to policies and encourages more effective implementation, as actors feel directly involved in the process of policy formulation and implementation.

On the other hand, the relationship between conflict and governance effectiveness shows a fairly strong negative correlation, with a correlation coefficient of -0.65 and a significance level of $p <0.01$. This means that the higher the level of conflict among Pentahelix actors, the lower the effectiveness of sustainable tourism governance. Conflict, in the context of governance, often arises due to differences in interests or unclear roles, which can hinder the decision-making process and policy implementation. Based on the theory of conflict in organizations, the existence of conflict that is not managed well will reduce productivity, hinder innovation, and create distrust among actors ultimately disrupting the sustainability. This finding is in line with the concept of collaborative governance, where the effectiveness of governance is highly dependent on the extent to which conflict can be minimized through constructive dialogue and clear conflict resolution mechanisms. In conflict resolution theory, success in creating effective governance requires proactive conflict management, by providing space for actors to express their views and seek joint solutions. In the context of Pentahelix, different actors may have different views on sustainability, but with structured collaboration, this conflict can be transformed into an opportunity for innovation and strengthening governance.

Conclusion

This study highlights the complexities of Pentahelix collaboration in sustainable tourism governance in Tanjung Bunga, emphasizing both the opportunities and challenges within multi-actor engagement. The findings indicate that while government and business actors play dominant roles in decision-making, community participation remains limited, often restricted to implementation rather than strategic planning. The uneven distribution of involvement suggests an imbalance in the application of the Pentahelix model, where some actors, particularly local communities and media, are marginalized in governance processes. Statistical analysis reveals a strong positive correlation between Pentahelix understanding and participation in decision-making ($r = 0.65$, $p < 0.01$), affirming that a higher comprehension of governance structures leads to greater actor engagement. Likewise, participation correlates positively with perceptions of sustainability ($r = 0.72$, $p < 0.01$), reinforcing the importance of inclusive governance in fostering sustainable tourism. However, conflict among Pentahelix actors negatively affects governance effectiveness ($r = -0.65$, $p < 0.01$), illustrating that unresolved tensions can hinder policy implementation and collaborative efforts. From a policy perspective, the study underscores the need for capacity-building initiatives to empower local communities, ensuring their more active

participation in governance. Additionally, fostering intensive dialogue and adaptive regulatory frameworks can help mitigate conflicts and enhance cooperation between actors. These strategies align with collaborative governance principles, which emphasize constructive engagement, mutual trust, and shared decision-making. While this study focuses on Tanjung Bunga, its implications extend to other coastal regions facing similar governance challenges. Strengthening multi-stakeholder collaboration and ensuring inclusive participation are critical steps toward achieving truly sustainable and equitable tourism governance.

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References

Aall, C. (2014). Sustainable tourism in practice: Promoting or perverting the quest for a sustainable development? *Sustainability*, 6(5): 2562–2583. DOI: https://doi.org/10.3390/su6052562.

Ansell, C. and Gash, A. (2018). Collaborative platforms as a governance strategy. *Journal of Public Administration Research and Theory*, 28(1): 16-32. DOI: https://doi.org/10.1093/jopart/mux030.

Borges, M. do R., Eusébio, C. and Carvalho, N. (2014). Governance for sustainable tourism: A review and directions for future research. *European Journal of Tourism Research*, 7(1): 45–56. DOI: https://doi.org/10.54055/ejtr.v7i.139.

Burke, P.J. and Siyaranamual, M.D. (2019). No One Left Behind in Indonesia? *Bulletin of Indonesian Economic Studies*, 55(3): 269–293. DOI: https://doi.org/10.1080/00074918.2019.1690410.

Butcher, S., Acuto, M. and Trundle, A. (2021). Leaving no urban citizens behind: An urban equality framework for deploying the sustainable development goals. *One Earth*, 4(11): 1548–1556. DOI: https://doi.org/10.1016/j.oneear.2021.10.015.

Chamidah, N., Guntoro, B. and Sulastri, E. (2020). Marketing communication and synergy of pentahelix strategy on satisfaction and sustainable tourism. *Journal of Asian Finance, Economics and Business*, 7(3): 177–190. DOI: https://doi.org/10.13106/jafeb.2020.vol7.no3.177.

Chienwattanasook, K. and Prianto, A.L. (2018). The interaction of lean, green and resilient supply chain practices as a determinant of supply chain performance (*La interacción de las prácticas de la cadena de suministro lean, verde y resistente como determinante del rendimiento de la cadena de suministro*). *Opcion*, 34(86): 2108-2126. Available online at: https://www.researchgate.net/publication/332568912_The_interaction_of_lean_green_and_resilient_supply_chain_practices_as_a_determinant_of_supply_chain_performance (Accessed on 21 January 2025).

Farmaki, A. (2020). Regional network governance and sustainable tourism. *Tourism and Sustainable Development Goals*, 192–214. DOI: https://doi.org/10.1201/9780429324253-12.

Freeman, R.E. (2018). Divergent stakeholder theory. In: Alan E. Singer (ed.), *Business Ethics and Strategy, Volumes I and II* (pp. 377–380). London: Routledge.

Freeman, R.E. (2023). The politics of stakeholder theory: Some future directions. In: R. Edward Freeman (ed.), *Selected Works on Stakeholder Theory and Business Ethics* (pp. 119–132). London: Springer.

Hajar, S., Faustyna, F. and Kholik, K. (2022). Muslim-Friendly Tourism towards Good Tourism Governance. *Otoritas: Jurnal Ilmu Pemerintahan*, 12(2): 142–161. DOI: https://doi.org/10.26618/ojip.v12i2.8052.

Hakim, L., Razak, A.R. and Prianto, A.L. (2024). Community Behaviour and Outreach Communication in Covid-19 Pandemic. *Dirasat: Human and Social Sciences*, 51(3): 1-13. DOI: https://doi.org/10.35516/hum.v51i3.4143.

Handam, H., Prianto, A. and Nahruddin, Z. (2020). The Development Strategy of Coastal Area in Makassar City through Governance System Analysis (GSA). Proceedings of the 1st International Conference on Environmental Governance, ICONEG 2019, 25-26 October 2019, Makassar, South Sulawesi, Indonesia. DOI: http://dx.doi.org/10.4108/eai.25-10-2019.2300535.

Harahap, Z., Julvirta, E. and Musawantoro, M. (2022). Arrangement of Makassar City Water Sports Tour Packages based on Geographic Information Systems. *Pusaka: Journal of Tourism, Hospitality, Travel and Business Event*, 70–75. DOI: https://doi.org/10.33649/pusaka.v4i1.159.

Higgins-Desbiolles, F. (2018). Sustainable tourism: Sustaining tourism or something more? *Tourism Management Perspectives*, 25: 157–160. DOI: https://doi.org/10.1016/j.tmp.2017.11.017.

Iskandar, I., Fajar, A.M. and Asmirah, A. (2024). The Impact of Development Policies in the Tanjung Bunga Area on the Social Life of Lette Village in Makassar City. *Citizen and Government Review*, 1(2): 65–74. Available online at: https://cjrjournal.com/index.php/cgr/article/view/7 (Accessed on 26 January 2025).

Jermsittiparsert, K., Chankoson, T., Prianto, A.L. and Thaicharoen, W. (2021). Business ethical values as a mechanism linking CSR and internal outcomes on job performance. *J. Legal Ethical & Regul. Isses*, *24*, 1. https://www.abacademies.org/articles/business-ethical-values-as-a-mechanism-linking-csr-and-internal-outcomes-on-job-performance-11855.html (Accessed: 26 January 2025)

Jermsittiparsert, K., Thaiprayoon, K., Prianto, A.L.and Kurniasih, D. (2019). The effect of shopping mall image on consumer behaviour in Indonesia. *Journal of Computational and Theoretical Nanoscience*, 16(11): 4731-4737. DOI: https://doi.org/10.1166/jctn.2019.8384.

Kılkış, Ş. (2024). Benchmarking Present and Future Performances of Coastal and Island Settlements with the Sustainable Development of Energy, Water and Environment Systems Index. *Journal of Sustainable Development of Energy, Water & Environment Systems (JSDEWES)*, 12(4). DOI: https://doi.org/10.13044/j.sdewes.d12.0518.

Lawelai, H., Sadat, A., Suherman, A., Alfinta, M.A. and Ishaq, L.M.A. (2024). Geographic information systems and big data analytics: optimizing digital

adoption to develop tourism in Buton Islands, Indonesia. *Otoritas: Jurnal Ilmu Pemerintahan*, 14(1): 228–244. DOI: https://doi.org/10.26618/ojip.v14i1.12466.

Mabibibi, M.A., Dube, K. and Thwala, K. (2021). Successes and challenges in sustainable development goals localisation for host communities around Kruger National Park. *Sustainability*, 13(10): 5341. DOI: https://doi.org/10.3390/su13105341.

MacNeill, T. and Wozniak, D. (2018). The economic, social, and environmental impacts of cruise tourism. *Tourism Management*, 66: 387–404. DOI: https://doi.org/10.1016/j.tourman.2017.11.002.

Mance, D., Vilke, S. and Debelić, B. (2020). Sustainable governance of coastal areas and tourism impact on waste production: Panel analysis of Croatian municipalities. *Sustainability*, 12(18): 7243. DOI: https://doi.org/10.3390/su12187243.

Maulana, D. and Yulianti, R. (2022). Multi-Actor Collaboration in Improving the Economy of the Fishing Community in Karangantu Coastal Area of Serang, Indonesia. *Journal of Contemporary Governance and Public Policy*, 3(2): 87–100. DOI: https://doi.org/https://doi.org/10.46507/jcgpp.v3i2.80.

Mweri, J. (2020). Sustainable development goals: Reaching people through their mother tongue. *Linguistics and Literature Studies*, 8(1): 14–25. DOI: https://doi.org/10.13189/lls.2020.080103.

Nasution, M.S., Rahmat, A.F., Handoko, T., Rahmanto, F. and Mayarni, M. (2023). Post-COVID Tourism Recovery Strategy for Tourism Villages: Multi-Stakeholder Participatory Approaches. *Journal of Contemporary Governance and Public Policy*, 4(2): 131–148. DOI: https://doi.org/10.46507/jcgpp.v4i2.152.

Nitivattananon, V. and Srinonil, S. (2019). Enhancing coastal areas governance for sustainable tourism in the context of urbanization and climate change in eastern Thailand. *Advances in Climate Change Research*, 10(1): 47–58. DOI: https://doi.org/10.1016/j.accre.2019.03.003.

Pan, S.Y., Gao, M., Kim, H., Shah, K.J., Pei, S.L. and Chiang, P. C. (2018). Advances and challenges in sustainable tourism toward a green economy. *Science of the Total Environment*, 635: 452–469. DOI: https://doi.org/10.1016/j.scitotenv.2018.04.134.

Pratomo, R.A., Samsura, D.A.A. and van der Krabben, E. (2022). Towards a sustainable life of local communities in coastal cities: A longitudinal study of new town development in Makassar. In: *Routledge Handbook of Urban Indonesia* (pp. 338–351). London: Routledge.

Prianto, A.L. and Abdillah, A. (2023a). Resilient Cities, Vulnerable Communities: Disaster Governance in the Coastal Cities in Indonesia. In: Singh, A. (eds.), *International Handbook of Disaster Research.* Singapore: Springer. DOI: https://doi.org/10.1007/978-981-19-8388-7_193.

Prianto, A.L. and Abdillah, A. (2023b). Vulnerable countries, resilient communities: Climate change governance in the coastal communities in Indonesia. In: Uday Chatterjee, Rajib Shaw, Gouri Sankar Bhunia, Martiwi Diah, Soumita and Banerjee (eds.), *Climate Change, Community Response and Resilience* (pp. 135-152). London: Elsevier. DOI: https://doi.org/10.1016/B978-0-443-18707-0.00007-2.

Prianto, A.L., Malik, I., Amalia, A.A. and Sari, I. (2024). Developing Information System Governance for Historical Buildings: A Bibliometric Analysis. In:

Vinay Kukreja, Amitoj Singh, Deepinder Kaur, Jagpuneet Kaur Bajwa (Eds.), *Digital Cultural Heritage* (pp. 222-239). Boca Raton, Florida, USA: CRC Press. DOI: http://dx.doi.org/10.1201/9781032630564-12.Prianto, A.L., Baharuddin, T. and Yuslaini, N. (2024). Governance with principles and standards: water footprint and sustainability in Indonesia. *Current Directions in Water Scarcity Research*, 8: 245-253. DOI: https://doi.org/10.1016/B978-0-443-23631-0.00017-0

Prianto, A.L., Nurmandi, A., Qodir, Z. and Jubba, H. (2021). Climate change and religion: From ethics to sustainability action. In: *E3S Web of conferences* (Vol. 277, p. 06011). Les Ulis, France: EDP Sciences. DOI: https://doi.org/10.1051/e3sconf/202127706011.

Rengganis, A.P., Prianto, A.L., Harakan, A., Muchsin, A., Tenorio, C.Band Amri, A.R. (2023). Strengthening national identity among Indonesian diaspora in general Santos city, Philippines. *Humanities, Arts and Social Sciences Studies*, 23(3): 539-552. DOI: https://doi.org/10.14456/hasss.2023.46.

Richardson, R.B. (2021). The role of tourism in sustainable development. In: *Oxford Research Encyclopedia of Environmental Science*. DOI: https://doi.org/10.1093/acrefore/9780199389414.013.387.

Saleh, M.S., Sukoso, A.H. and Tamsil, A. (2016). The Interaction of the Stakeholders Group in the Management of the Sustainability of the Coastal Resources in Makassar City. *Specialty Journal of Agricultural Sciences*, 2(1): 12–19. Available online at: https://sciarena.com/article/the-interaction-of-the-stakeholders-group-in-the-management-of-the-sustainability-of-the-coastal-resources-in-makassar-city (Accessed on 26 January 2025).

Scheyvens, R. and Biddulph, R. (2017). Inclusive tourism development. *Tourism Geographies*, 20(4): 589–609. DOI: https://doi.org/10.1080/14616688.2017.1381985.

Smith, J. and Spencer, A.J. (2020). No one will be left behind? Taíno indigenous communities in the Caribbean and the road to SDGs 2030. *Worldwide Hospitality and Tourism Themes*, 12(3): 305–320. DOI: https://doi.org/10.1108/WHATT-02-2020-0011.

Sriyakul, T., Jermsittiparsert, K., Phanwichit, S. and Prianto, A.L. (2019). Improving the perceived partnership synergy and sustainability through the social and political context in Indonesia: Business law compliance as a mediator. *International Journal of Innovation, Creativity and Change*, 8(8): 142-159. Available online at: https://www.ijicc.net/images/vol8iss8/8810_Sriyakaul_2019_E_R1.pdf (Accessed on 19 January 2025).

Surya, B. (2014). Social change, spatial articulation in the dynamics of boomtown construction and development (case study of Metro Tanjung Bunga boomtown, Makassar). *Modern Applied Science*, 8(4): 238–245. DOI: https://doi.org/10.5539/mas.v8n4p238.

Surya, B., Salim, A., Hernita, H., Suriani, S., Menne, F. and Rasyidi, E.S. (2021). Land use change, urban agglomeration, and urban sprawl: A sustainable development perspective of Makassar city, Indonesia. *Land*, 10(6): 556. DOI: https://doi.org/10.3390/land10060556.

Surya, B., Syafri Abubakar, H., Sahban, H. and Sakti, H.H. (2020). Spatial Transformation of New City Area: Economic, Social, and Environmental

Sustainability Perspective of Makassar City, Indonesia. *Journal of Southwest Jiaotong University*, 55(3). DOI: https://doi.org/10.35741/issn.0258-2724.55.3.30

Towner, N. and Milne, S. (2017). Sustainable Surfing Tourism Development in the Mentawai Islands, Indonesia: Local Stakeholder Perspectives. *Tourism Planning & Development*, 14(4): 503–526. DOI: https://doi.org/10.1080/21568316.2017.1287122.

Whitcraft, A.K., Becker-Reshef, I., Justice, C.O., Gifford, L., Kavvada, A. and Jarvis, I. (2019). No pixel left behind: Toward integrating Earth Observations for agriculture into the United Nations Sustainable Development Goals framework. *Remote Sensing of Environment*, 235: 111470. DOI: https://doi.org/10.1016/j.rse.2019.111470.

Wongthong, P. and Harvey, N. (2014). Integrated coastal management and sustainable tourism: A case study of the reef-based SCUBA dive industry from Thailand. *Ocean & Coastal Management*, 95: 138–146. DOI: https://doi.org/10.1016/j.ocecoaman.2014.04.004.

Younus, M., Mutiarin, D., Nurmandi, A., Prianto, A.L., Nugroho, H.A. and Manaf, H.A. (2024). Data-Driven Insights into Industry 5.0 Evolution: A Scientometric Analysis Approach. In: Nitendra Kumar, Surya Kant Pal, Priyanka Agarwal, Joanna Rosak-Szyrocka and Vishal Jain (eds.), *Human-Machine Collaboration and Emotional Intelligence in Industry 5.0* (pp. 19-43). New Delhi: IGI Global Scientific Publishing.

Zitri, I., Rifaid, R., Lestanata, Y. and Kurniawan, C. (2024). Navigating digital tourism governance: a case study of branding strategies in the Mandalika special economic zones. *Otoritas: Jurnal Ilmu Pemerintahan*, 14(1): 148–159. DOI: https://doi.org/10.26618/ojip.v14i1.12423.

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Annexure – I:

RESPONDENT IDENTITY

1. *Gender:*
   ☐ Male
   ☐ Female
2. *Age:*
   ☐ <20 years
   ☐ 20-30 years
   ☐ 31-40 years
   ☐ 41-50 years
   ☐ >50 years
3. *Last Education Level:*
   ☐ Elementary School
   ☐ Junior High School
   ☐ Senior High School
   ☐ Diploma/Bachelor's Degree
   ☐ Master's/Doctoral Degree
4. *Main Occupation:*
   ☐ Government employee
   ☐ Private employee
   ☐ Entrepreneur
   ☐ Tourism sector worker
   ☐ Fisherman
   ☐ Farmer
   ☐ Others, please specify: _____
5. *Residential Status:*
   ☐ Native resident of Tanjung Bunga
   ☐ Migrant living in Tanjung Bunga
   ☐ Not living in Tanjung Bunga but involved in the local tourism sector
6. *How long have you lived or worked in Tanjung Bunga?*
   ☐ <1 year
   ☐ 1-5 years
   ☐ 6-10 years
   ☐ >10 years
7. *To what extent are you involved in the tourism sector in Tanjung Bunga?*
   ☐ Not involved at all
   ☐ Indirectly involved (e.g., as a resident affected by tourism)

☐ Directly involved (e.g., working or owning a business in the tourism sector)

8. *Your main role in the tourism sector (if involved):*
   ☐ Tourism business owner (hotel, restaurant, travel agency, etc.)
   ☐ Tour guide
   ☐ Artisan or local product seller
   ☐ Employee in the tourism sector
   ☐ Academic or tourism researcher
   ☐ Government official or employee related to tourism
   ☐ Environmental activist or local community member
   ☐ Others, please specify: _____
9. *In your opinion, how has tourism in Tanjung Bunga developed over the past five years?*
   ☐ Very rapidly
   ☐ Moderately developed
   ☐ Stagnant
   ☐ Declining
10. *Are you willing to be interviewed further if necessary?*
    ☐ Yes
    ☐ No

LIST OF QUESTIONS

No.	*Question*	*Answer*
1.	In your opinion, what is the role of each actor in the Pentahelix model in tourism governance in Tanjung Bunga?	
2.	What are the main challenges in building collaboration between the government, academia, business, community, and media in tourism governance?	
3.	How do you perceive the involvement of academia in supporting sustainable tourism policies and practices in Tanjung Bunga?	
4.	What is the role of the media in influencing tourism management policies and practices in your area?	
5.	What has been your experience in participating in tourism-related decision-making in Tanjung Bunga?	

No.	*Question*	*Answer*
6.	What obstacles have you faced in participating in tourism governance in your area?	
7.	What suggestions do you have to encourage more active and effective community participation in managing the tourism sector?	
8.	Do you think the economic benefits of tourism are evenly distributed among the local community? If not, what are the main causes?	
9.	How has the presence of external investors affected the welfare of the local community in the tourism sector?	
10.	What strategies can be implemented to empower the local community economically in the tourism sector?	
11.	How has tourism changed the social and cultural life of the community in Tanjung Bunga?	
12.	Do you see any cultural or value conflicts arising from tourism development? How should these be addressed?	
13.	In your opinion, what is the impact of tourism infrastructure development on the coastal environment in Tanjung Bunga?	
14.	What can the government and businesses do to ensure environmental sustainability in this tourist area?	
15.	Have you ever witnessed or experienced conflicts in tourism governance in Tanjung Bunga? If yes, how were they resolved, and do you think the resolution was fair?	

Annexure – II: Research Questionnaire

Section 1: Respondent Identity

1. *Name of Respondent:*
2. *Gender:*
   ☐ Male
   ☐ Female
3. *Age:*
   ☐ <20 years
   ☐ 20-30 years
   ☐ 31-40 years
   ☐ 41-50 years
   ☐ >50 years
4. *Last Education Level:*
   ☐ Elementary School
   ☐ Junior High School
   ☐ Senior High School
   ☐ Diploma/Bachelor's Degree
   ☐ Master's/Doctoral Degree
5. *Do you live around the Tanjung Bunga tourist area?*
   ☐ Yes
   ☐ No
6. *Your main occupation:*
   ☐ Government employee
   ☐ Private employee
   ☐ Entrepreneur
   ☐ Student
   ☐ Others

Section 2: Understanding of the Pentahelix Concept

7. *Have you ever heard of the Pentahelix concept in tourism* **governance?**
   ☐ Yes
   ☐ No
8. *How well do you understand the roles of the five actors in Pentahelix?*
   ☐ Not at all
   ☐ Slightly understand
   ☐ Fairly understand
   ☐ Fully understand
9. *In your opinion, which actor is the most dominant in tourism management in Tanjung Bunga?*

☐ Government
☐ Academics
☐ Business
☐ Community
☐ Media

10. *Do you think collaboration among actors in Pentahelix has been well implemented?*
☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree
11. *Do you feel that all actors in Pentahelix have balanced roles?*
☐ Strongly disagree
☐ Disagree
☐ Neutral
☐ Agree
☐ Strongly agree

Section 3: Community Participation in Tourism Governance

12. *To what extent do you feel involved in planning and managing tourism in Tanjung Bunga?*
☐ 1 (Not involved at all)
☐ 2 (Slightly involved)
☐ 3 (Fairly involved)
☐ 4 (Involved)
☐ 5 (Highly involved)
13. *How often do you attend tourism meetings or discussions?*
☐ 1 (Never)
☐ 2 (Rarely, 1-2 times per year)
☐ 3 (Occasionally, every few months)
☐ 4 (Often, every month)
☐ 5 (Very often, more than once a month)
14. *How clear are the official mechanisms for the community to express opinions on tourism?*
☐ 1 (No mechanism)
☐ 2 (Exists, but unclear)
☐ 3 (Fairly clear)

☐ 4 (Clear)
☐ 5 (Very clear)

15. *To what extent do you feel that the government considers community aspirations?*
    ☐ 1 (Not considered at all)
    ☐ 2 (Slightly considered)
    ☐ 3 (Fairly considered)
    ☐ 4 (Considered)
    ☐ 5 (Highly considered)
16. *To what extent do you want to be more actively involved in tourism management?*
    ☐ 1 (Not at all)
    ☐ 2 (Slightly)
    ☐ 3 (Fairly)
    ☐ 4 (Involved)
    ☐ 5 (Highly involved)

Section 4: Economic Impact of Tourism

17. *To what extent do you feel the economic benefits of tourism in Tanjung Bunga?*
    ☐ 1 (No benefit at all)
    ☐ 2 (Small benefit)
    ☐ 3 (Fairly beneficial)
    ☐ 4 (Beneficial)
    ☐ 5 (Highly beneficial)
18. *To what extent has tourism improved the economic welfare of the local community?*
    ☐ 1 (No improvement at all)
    ☐ 2 (Slight improvement)
    ☐ 3 (Fairly improved)
    ☐ 4 (Improved)
    ☐ 5 (Highly improved)
19. *How stable and sustainable are job opportunities created by the tourism sector?*
    ☐ 1 (Very unstable and unsustainable)
    ☐ 2 (Slightly stable and sustainable)
    ☐ 3 (Fairly stable and sustainable)
    ☐ 4 (Stable and sustainable)
    ☐ 5 (Highly stable and sustainable)

20. *To what extent has your income increased due to tourism activities?*
    - ☐ 1 (No increase)
    - ☐ 2 (Small increase)
    - ☐ 3 (Fair increase)
    - ☐ 4 (Increased)
    - ☐ 5 (Significantly increased)
21. *To what extent do the economic benefits of tourism go more to external investors than to the local community?*
    - ☐ 1 (Not at all, more enjoyed by the local community)
    - ☐ 2 (More enjoyed by the local community)
    - ☐ 3 (Balanced between the local community and external investors)
    - ☐ 4 (More enjoyed by external investors)
    - ☐ 5 (Mostly enjoyed by external investors)

Section 5: Social and Cultural Impact

22. *To what extent has tourism influenced local cultural values?*
    - ☐ 1 (No influence at all)
    - ☐ 2 (Slight influence)
    - ☐ 3 (Fairly influential)
    - ☐ 4 (Influential)
    - ☐ 5 (Highly influential)
23. *To what extent has tourism changed social life patterns in the community?*
    - ☐ 1 (No change)
    - ☐ 2 (Small change)
    - ☐ 3 (Fairly changed)
    - ☐ 4 (Changed)
    - ☐ 5 (Significantly changed)
24. *To what extent is the local community involved in promoting culture and local wisdom in the tourism sector?*
    - ☐ 1 (Not involved at all)
    - ☐ 2 (Slightly involved)
    - ☐ 3 (Fairly involved)
    - ☐ 4 (Involved)
    - ☐ 5 (Highly involved)
25. *How significant is the role of media in introducing local culture to tourists?*
    - ☐ 1 (No role at all)
    - ☐ 2 (Slightly significant)
    - ☐ 3 (Fairly significant)

☐ 4 (Significant)
☐ 5 (Highly significant)

26. *How effective are programs in protecting local cultural heritage within tourism development?*
☐ 1 (No program)
☐ 2 (Slightly effective)
☐ 3 (Fairly effective)
☐ 4 (Effective)
☐ 5 (Highly effective)

Section 6: Environmental Impact of Tourism

27. *To what extent do you feel the negative environmental impact of tourism in Tanjung Bunga?*
☐ 1 (No negative impact)
☐ 2 (Slight impact)
☐ 3 (Fairly negative impact)
☐ 4 (Negative impact)
☐ 5 (Highly negative impact)
28. *To what extent has tourism infrastructure development affected the coastal ecosystem?*
☐ 1 (No impact at all)
☐ 2 (Slight impact)
☐ 3 (Fairly impactful)
☐ 4 (Impactful)
☐ 5 (Highly impactful)
29. *To what extent have the government or private sector taken measures to mitigate the environmental impact of tourism?*
☐ 1 (No effort at all)
☐ 2 (Very little effort)
☐ 3 (Fairly enough effort)
☐ 4 (Significant effort)
☐ 5 (Extensive effort)
30. *How often do you participate in environmental conservation activities related to tourism?*
☐ 1 (Never)
☐ 2 (Rarely, 1-2 times per year)
☐ 3 (Occasionally, every few months)
☐ 4 (Often, every month)
☐ 5 (Very often, more than once a month)

31. *How effective are environmental regulations in ensuring the sustainability of tourism in Tanjung Bunga?*
    - ☐ 1 (Not effective at all)
    - ☐ 2 (Slightly effective)
    - ☐ 3 (Fairly effective)
    - ☐ 4 (Effective)
    - ☐ 5 (Highly effective)

Section 7: Collaboration in the Pentahelix Model

32. *How strong is the collaboration between the government and the community in tourism management in Tanjung Bunga?*
    - ☐ 1 (No collaboration)
    - ☐ 2 (Weak collaboration)
    - ☐ 3 (Fair collaboration)
    - ☐ 4 (Strong collaboration)
    - ☐ 5 (Very strong collaboration)
33. *How significant is the role of academics in tourism management in Tanjung Bunga?*
    - ☐ 1 (No role at all)
    - ☐ 2 (Very small role)
    - ☐ 3 (Fairly significant role)
    - ☐ 4 (Significant role)
    - ☐ 5 (Highly significant role)
34. *How fair are the economic benefits provided by the tourism sector to the local community?*
    - ☐ 1 (Very unfair)
    - ☐ 2 (Slightly unfair)
    - ☐ 3 (Fair)
    - ☐ 4 (Fairly distributed)
    - ☐ 5 (Highly fair)
35. *How significant is the role of media in promoting transparency in tourism management?*
    - ☐ 1 (No role at all)
    - ☐ 2 (Very little role)
    - ☐ 3 (Fairly significant role)
    - ☐ 4 (Significant role)
    - ☐ 5 (Highly significant role)
36. *How challenging is it to build collaboration among Pentahelix actors in Tanjung Bunga?*
    - ☐ 1 (No challenge)

☐ 2 (Slight challenge)
☐ 3 (Fairly challenging)
☐ 4 (Challenging)
☐ 5 (Highly challenging)

Section 8: Conflicts in Tourism Governance

37. *How often have you witnessed or experienced conflicts related to tourism management in Tanjung Bunga?*
    ☐ 1 (Never)
    ☐ 2 (Rarely)
    ☐ 3 (Occasionally)
    ☐ 4 (Often)
    ☐ 5 (Very often)
38. *To what extent do conflicts in the tourism sector in Tanjung Bunga arise from conflicting interests?*
    ☐ 1 (No conflicting interests)
    ☐ 2 (Slight conflicting interests)
    ☐ 3 (Fairly conflicting interests)
    ☐ 4 (Significant conflicting interests)
    ☐ 5 (Highly conflicting interests)
39. *How fair and effective is the conflict resolution mechanism in the tourism sector?*
    ☐ 1 (Very unfair and ineffective)
    ☐ 2 (Slightly fair and effective)
    ☐ 3 (Fairly fair and effective)
    ☐ 4 (Fair and effective)
    ☐ 5 (Highly fair and effective)
40. *How strong is the local community in facing conflicts with investors?*
    ☐ 1 (No strength at all)
    ☐ 2 (Very weak strength)
    ☐ 3 (Fairly strong)
    ☐ 4 (Strong)
    ☐ 5 (Highly strong)
41. *How significant is the government's role in resolving conflicts in the tourism sector?*
    ☐ 1 (No influence at all)
    ☐ 2 (Very little influence)
    ☐ 3 (Fairly influential)
    ☐ 4 (Influential)
    ☐ 5 (Highly influential)

Section 9: Evaluation and Recommendations

42. *How open is the government in tourism management in Tanjung Bunga?*
    - ☐ 1 (Very closed)
    - ☐ 2 (Slightly open)
    - ☐ 3 (Fairly open)
    - ☐ 4 (Open)
    - ☐ 5 (Highly open)
43. *How effective are tourism policies in improving community welfare?*
    - ☐ 1 (Not effective at all)
    - ☐ 2 (Slightly effective)
    - ☐ 3 (Fairly effective)
    - ☐ 4 (Effective)
    - ☐ 5 (Highly effective)
44. *How aware are tourists of their environmental impact?*
    - ☐ 1 (Not aware at all)
    - ☐ 2 (Slightly aware)
    - ☐ 3 (Fairly aware)
    - ☐ 4 (Aware)
    - ☐ 5 (Highly aware)
45. *How sufficient is the training provided to the community to enhance their involvement in tourism?*
    - ☐ 1 (No training at all)
    - ☐ 2 (Slightly sufficient)
    - ☐ 3 (Fairly sufficient)
    - ☐ 4 (Sufficient)
    - ☐ 5 (Highly sufficient)
46. *How fair is the distribution of economic benefits from the tourism sector?*
    - ☐ 1 (Very unfair)
    - ☐ 2 (Slightly unfair)
    - ☐ 3 (Fair)
    - ☐ 4 (Fairly distributed)
    - ☐ 5 (Highly fair)
47. *How strong are the regulations protecting the rights of the local community in the tourism sector?*
    - ☐ 1 (No protection at all)
    - ☐ 2 (Very weak protection)
    - ☐ 3 (Fairly strong protection)

☐ 4 (Strong protection)
☐ 5 (Highly strong protection)

48. *To what extent does the tourism business sector contribute to infrastructure development?*
☐ 1 (No contribution at all)
☐ 2 (Slight contribution)
☐ 3 (Fair contribution)
☐ 4 (Significant contribution)
☐ 5 (Highly significant contribution)
49. *How well is community-based tourism developing in Tanjung Bunga?*
☐ 1 (Not developed at all)
☐ 2 (Slightly developed)
☐ 3 (Fairly developed)
☐ 4 (Developed)
☐ 5 (Highly developed)
50. *How good is the quality of tourism promotion by the media?*
☐ 1 (Very poor)
☐ 2 (Poor)
☐ 3 (Fairly good)
☐ 4 (Good)
☐ 5 (Very good)
51. *How satisfied are you with tourism management in Tanjung Bunga?*
☐ 1 (Very dissatisfied)
☐ 2 (Dissatisfied)
☐ 3 (Fairly satisfied)
☐ 4 (Satisfied)
☐ 5 (Highly satisfied)

Authors' Declarations and Essential Ethical Compliances

Authors' Contributions (in accordance with ICMJE criteria for authorship)

Contribution	*Author 1*	*Author 2*	*Author 3*
Conceived and designed the research or analysis	Yes	No	No
Collected the data	No	Yes	Yes
Contributed to data analysis & interpretation	No	Yes	Yes
Wrote the article/paper	Yes	No	No
Critical revision of the article/paper	Yes	No	No
Editing of the article/paper	No	Yes	No
Supervision	Yes	No	No
Project Administration	No	No	Yes
Funding Acquisition	Yes	No	No
Overall Contribution Proportion (%)	40%	30%	30%

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Research involving human bodies or organs or tissues (Helsinki Declaration)
The author(s) solemnly declare(s) that this research has not involved any human subject (body or organs) for experimentation. It was not a clinical research. The contexts of human population/participation were only indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of Helsinki Declaration does not apply in cases of this study or written work.

Research involving animals (ARRIVE Checklist)
The author(s) solemnly declare(s) that this research has not involved any animal subject (body or organs) for experimentation. The research was not based on laboratory experiment involving any kind animal. The contexts of animals were only indirectly covered through literature review. Therefore, an Ethical Clearance (from a Committee or Authority) or ethical obligation of ARRIVE does not apply in cases of this study or written work.

Research on Indigenous Peoples and/or Traditional Knowledge
The author(s) solemnly declare(s) that this research has not involved Indigenous Peoples as participants or respondents. The contexts of Indigenous Peoples or Indigenous Knowledge were only indirectly covered through literature review. Therefore, a Self-Declaration in this regard does not apply in case of this study or written work, and is not appended.

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The author(s) solemnly declare(s) that this research has not involved the plants for experiment and field studies. Some contexts of plants are also indirectly covered through literature review. Thus, during this research the author(s) obeyed the principles

of the Convention on Biological Diversity and the Convention on the Trade in Endangered Species of Wild Fauna and Flora.

Research Involving Local Community Participants (Non-Indigenous) or Children
The author(s) solemnly declare(s) that this research has directly involved local community participants or respondents belonging to non-Indigenous peoples. However, this study has not involved any child in any form directly. The contexts of different humans, people, populations, men/women/children and ethnic people were only indirectly covered through literature review. Therefore, a prior informed consent (PIC) of the respondents or Self-Declaration in this regard applies, and is appended.

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)
The author(s) has/have NOT complied with PRISMA standards. It is not relevant in case of this study or written work.

Competing Interests/Conflict of Interest
Author(s) has/have no competing financial, professional, or personal interests from other parties or in publishing this manuscript. There is no conflict of interest with the publisher or the editorial team or the reviewers.

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To see original copy of these declarations signed by Corresponding/First Author (on behalf of other co-authors too), please download associated zip folder [Declarations] from the published Abstract page accessible through and linked with the DOI: https://doi.org/10.33002/nr2581.6853.080101.

INFORMATION AND CONSENT FORM FROM RESPONDENTS
(Non-Indigenous Respondents)
This form was translated into local language for the respondents

Title of the Research:
The Dynamics of No One Left Behind: Contestation of Pentahelix Actors in Sustainable Tourism Governance in the Coastal Area of Tanjung Bunga, Indonesia

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A) INFORMATION TO PARTICIPANTS

1. Objectives of the research
The objectives of this study were to examining the dynamics of interaction between Pentahelix actors in sustainable tourism governance in the coastal area of Tanjung Bunga,
South Sulawesi, Indonesia

2. Participation in research
The researcher will ask you several pertinent questions. This interview will be recorded in written form and should last about 50-60 minutes. The location and timing of the interview will be determined by you, depending on your availability and convenience.

3. Risks and disadvantages
There is no particular risk involved in this project. You may, however, refuse to answer any question at any time or even terminate the interview.

4. Advantanges and benefits
You will receive intangible benefits even if you refuse to answer some questions or decide to terminate the interview. You will also contribute to strengthen community
participation through training and intensive dialogue between actors to
create a more equitable and sustainable tourism governance framework

5. Confidentiality
Personal information you give us will be kept confidential. No information identifying you in any way will be published. In addition, each participant in the research will be assigned a code and only the researcher will know your identity.

6. Right of withdrawal

Your participation in this project is entirely voluntary and you can at any time withdraw from the research on simple verbal notice and without having to justify your decision, without consequence to you. If you decide to opt out of the research, please contact the researcher at the telephone number or email listed below. At your request, all information concerning you can also be destroyed. However, after the outbreak of the publishing process, it is impossible to destroy the analyses and results on the data collected.

B) CONSENT

Declaration of the participant

- ⇨ I understand that I can take some time to think before agreeing or not to participate in the research.
- ⇨ I can ask the research team questions and ask for satisfactory answers.
- ⇨ I understand that by participating in this research project, I do not relinquish any of my rights, including my right to terminate the interview at any time.
- ⇨ I have read this information and consent form and agree to participate in the research project.
- ⇨ I agree that the interviews be recorded in written form by the researcher: Yes ( ) No ( )

Signature of the participant : _____ Date : _____

Surname : _____ First name : _____

Researcher engagement

I explained to the participant the conditions for participation in the research project. I answered to the best of my knowledge the questions asked and I made sure of the participant's understanding. I, along with the research team, agree to abide by what was agreed to in this information and consent form.

Signature of the researcher : Date : 1-06-2024

Surname: Prianto First name: Andi Luhur

- ⇨ Should you have any questions regarding this study, or to withdraw from the research, please contact Dr. Andi Luhur Prianto by e-mail luhur@unismuh.ac.id

- ⇨ If you have any concerns about your rights or about the responsibilities of researchers concerning your participation in this project, you can contact the Prof. Dr. Nurlina Subair, Department of Sosiology Education, Universitas Muhammadiyah Makassar, Indonesia Jl. Sultan Alauddin No. 259 Makassar, Indonesia, 90221 by email nurlinasubair@unismuh.ac.id